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ABSTRACT

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A method and circuit for compensating for a DC offset generated in a signal processing apparatus are disclosed. The signal processing apparatus comprises a low noise amplifier; a mixer for mixing the signals outputted from the low noise amplifier with a local oscillation signal; a first offset compensation amplifier for amplifying the output signals of the mixer and compensating for a DC offset existing in the output signals of the mixer firstly according to a first control signal applied thereto; a second offset compensation amplifier connected to the output of the first offset compensation amplifier to amplify signals inputted thereto, the second offset compensation amplifier compensating for a DC offset existing in the input signals secondarily according to a second control signal applied thereto; a variable gain amplifier for amplifying the output signals of the second offset compensation amplifier while controlling gain of the output signals; an offset detector for detecting a DC offset existing in the output signals of the variable gain amplifier; and an offset compensator for generating the first and second control signals to compensate for the DC offset detected by the offset detector.